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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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20457	7590	08/12/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP			DEAN, RAYMOND S	
1300 NORTH SEVENTEENTH STREET			ART UNIT	PAPER NUMBER
SUITE 1800			2684	
ARLINGTON, VA 22209-9889			DATE MAILED: 08/12/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	KAWAGUCHI ET AL. 
	09/828,214	Examiner	
	Raymond S Dean	Art Unit	2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 5/20/04  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 - 11 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 5 is/are allowed.  
 6) Claim(s) 1 - 4 and 6 - 11 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 3.

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION*****Response to Arguments***

1. Applicant's arguments, see amendment filed May 26, 2004 with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 102(e) as being anticipated by Mitzutani (US 2001/0022780), claims 2, 6, and 10 under 35 U.S.C. 103(a) as being unpatentable over Mitzutani in view of Peters (US 6,601,093), claim 3 under 35 U.S.C. 103(a) as being unpatentable over Mitzutani in view of Peters and in further view of BJORNDALH (US 2002/0065099), and claims 7 and 11 under 35 U.S.C. 103(a) as being unpatentable over Mitzutani in view of Peters and in further view of Nakamura (US 5,771,352) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of an updated search.

There is a reference to the hyperlink <http://www.bluetooth.com> on page 8, second paragraph from the bottom, of the printed version of the specification. When a patent application with embedded hyperlinks and/or other forms of browser-executable code issues as a patent (or is published as a patent application publication) and the patent document is placed on the USPTO web page, when the patent document is retrieved and viewed via a web browser, the URL is interpreted as a valid HTML code and it becomes a live web link. When a user clicks on the link with a mouse, the user will be transferred to another web page identified by the URL, if it exists, which could be a commercial web site. USPTO policy does not permit the USPTO to link to any commercial sites since

the USPTO exercises no control over the organization, views or accuracy of the information contained on these outside sites.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 2, 6 – 7, and 9 - 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (5,771,352).

Regarding Claim 1, Nakamura teaches a group communication method in which a plurality of communication terminals form a closed communication network and perform communication, said group communication method comprising a step in which a calling message including group identification information is broadcast from a first communication terminal to a large number of unspecified communication terminals (Column 2 lines 48 – 51, Column 5 lines 61 – 67, Column 6 lines 1 – 7, Column 8 lines 60 – 67, Column 9 lines 1 – 8, Column 9 lines 34 - 45), and a step in which the first communication terminal receives response messages broadcast from other communication terminals and including the group identification information (Column 9 lines 34 – 40, Column 10 lines 41 – 49, the individual terminal discriminating information can be replaced

with the group information after group setting occurs thus enabling the terminals in said group to respond with the group number), wherein the closed communication network is formed of the first communication terminal and at least one communication terminal which transmits the response message within a given time after the calling message is transmitted (Column 7 lines 58 – 65, Column 10 lines 41 – 49, Column 17 lines 6 – 15), wherein a group communication is performed by the communication message using the group identification information (Column 9 lines 34 – 45).

Regarding Claim 2, Nakamura teaches all of the claimed limitations recited in Claim 1. Nakamura further teaches a group communication method wherein the group communication method includes a step in which the first communication terminal stores an address of the transmission source terminal of the response message received within a given time after transmitting the calling message as a group constituting terminal corresponding to the group identifier (Column 7 lines 9 – 18, Column 10 lines 41 - 49) and a step in which a control message indicative of the start of the group communication is transmitted to the group constituting terminal from the first communication terminal (Column 17 lines 6 - 15).

Regarding Claim 6, Nakamura teaches a group communication method which performs communication by forming a closed communication network with a plurality of communication terminals, the group communication method comprising a step in which a calling message for forming the group broadcast from other communication terminals is received (Column 9 lines 34 – 45, Column

17 lines 6 – 15), a step in which a communication terminal which has a will to participate in the group broadcasts a response message including group identification information which the calling message indicates (Column 9 lines 34 – 40, Column 10 lines 41 – 49, the individual terminal discriminating information can be replaced with the group information after group setting occurs thus enabling the terminals in said group to respond with the group number), and a step in which the calling message received from other communication terminal and a terminal identification which indicates a transmission source of the response message are stored as an identification of a group constituting terminal corresponding to the group identifier (Column 7 lines 9 – 18), wherein a closed communication network is formed of the communication terminal which becomes the transmission source of the calling message and at least one communication terminal which transmits the response message within a given time after the transmission of the calling message (Column 7 lines 58 – 65, Column 10 lines 41 – 49, Column 17 lines 6 – 15), and group communication is performed by the communication message using the group identification information (Column 9 lines 34 – 45).

Regarding Claim 7, Nakamura teaches all of the claimed limitations recited in Claim 6. Nakamura further teaches the communication terminal which receives the calling message for forming the group from other communication terminal displays group kind information indicated by the calling message on a display screen (Column 10 lines 50 – 55) and broadcasts the response message in response to an input manipulation indicating the participation of terminal user

to the group (Column 10 lines 50 – 55, Column 17 lines 6 – 15, the user can select which terminal to communicate with thus there is an inherent input manipulation).

Regarding Claim 9, Nakamura teaches a group communication method in which a plurality of communication terminals form a closed communication network and perform communication, said group communication method comprising a step in which a calling message including group identification information is broadcast from a first communication terminal to a large number of unspecified communication terminals (Column 2 lines 48 – 51, Column 5 lines 61 – 67, Column 6 lines 1 – 7, Column 8 lines 60 – 67, Column 9 lines 1 – 8, Column 9 lines 34 - 45), a step in which the first communication terminal receives response messages broadcast from other communication terminals and including the group identification information (Column 9 lines 34 – 40, Column 10 lines 41 – 49, the individual terminal discriminating information can be replaced with the group information after group setting occurs thus enabling the terminals in said group to respond with the group number), wherein the closed communication network is formed of the first communication terminal and at least one communication terminal which transmits the response message within a given time after the calling message is transmitted (Column 7 lines 58 – 65, Column 10 lines 41 – 49, Column 17 lines 6 – 15), wherein a group communication is performed by the communication message using the group identification information (Column 9 lines 34 – 45) and wherein the calling message includes information whether group communication is to be opened or

not (Column 17 lines 6 – 15, if the group communication is open/closed the terminals will respond with an reply/reject message thus there will be an inquiry as to whether the communication with said terminals will be accepted or rejected) , and when the group communication is opened, a control procedure necessary for adding a group constituting terminal between the constituting terminal of the closed communication network formed in an initial state and a newly participating communicating terminal is executed (Column 18 lines 11 – 56).

Regarding Claim 10, Nakamura teaches a communication terminal equipment which performs a group communication with other communication terminals comprising a transmission/reception circuit for transmitting and receiving a communication message (Figure 1, Column 5 lines 48 - 54), a display device (Column 10 lines 52 - 54), an input device manipulated by a user (Column 10 lines 54 – 55, the user can select which terminal to communicate with thus there is an inherent input device), a storage part which stores a connection control program for controlling a transmission/reception of the communication message (Figure 1, Column 5 lines 46 – 48, when the application software executes the communication control section conducts it's processes thus said application software controls said communication control section, said application software is needed to initiate the sending and receiving of information thus there will be an inherent storage for said application software so that said software can be invoked whenever there is a need to communicate), and a processor which executes the connection control program, wherein the processor broadcasts the calling message including group identification information to a large number of

unspecified communication terminals in response to an user input from the input device (Column 2 lines 48 – 51, Column 5 lines 61 – 67, Column 6 lines 1 – 7, Column 8 lines 60 – 67, Column 9 lines 1 – 8, Column 9 lines 34 – 45, in order for the application software to execute there must be a processor to run or execute said application software), stores an address of the transmission terminals of the response message including the identification information received by the transmission/reception circuit (Column 7 lines 9 – 18, Column 10 lines 41 – 49), forms a group between the communication terminal equipment and the transmission terminal of the response message received within a given time after transmitting the calling message (Column 7 lines 58 – 65, Column 10 lines 41 – 49, Column 17 lines 6 – 15), and performs a control operation such that the group communication is performed using the group identification information (Column 9 lines 34 – 45).

Regarding Claim 11, Nakamura teaches all of the claimed limitations recited in Claim 10. Nakamura further teaches the calling message from other terminal equipment is received by the transmission/reception circuit, the processor displays group kind information included in the calling message on the display device (Column 10 lines 50 – 55, Column 17 lines 6 – 15) and broadcasts the response message including the group identification information in response to a user input from the input device (Column 9 lines 34 – 40, Column 10 lines 41 – 55, Column 17 lines 6 – 15, the individual terminal discriminating information can be replaced with the group information after group setting occurs thus enabling the terminals in said group to respond with the group number).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (5,771,352) in view of Vogler (US 2001/0055395).

Regarding Claim 3, Nakamura teaches all of the claimed limitations recited in Claim 2. Nakamura does not teach a step in which, before the transmission of the control message indicative of the start of the group communication, an encryption key to be used in the group communication is informed from the first communication terminal to the group-constituting terminal.

Vogler teaches an encryption key to be used in the communication is informed from the first communication terminal to the second communication terminal (Section 0011, Section 0013 lines 3 – 6, Section 0014 lines 1 – 3, Section 0015, Section 0016 lines 1 – 3).

Nakamura and Vogler both teach communication devices that communicate via wireless links thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encryption

key taught in Vogler in the wireless system of Nakamura for the purpose of providing secure communications between the terminals as taught by Vogler.

Regarding Claim 4, Nakamura teaches a group communication method in which a plurality of communication terminals form a closed communication network and perform communication, said group communication method comprising a step in which a calling message including group identification information is broadcast from a first communication terminal to a large number of unspecified communication terminals (Column 2 lines 48 – 51, Column 5 lines 61 – 67, Column 6 lines 1 – 7, Column 8 lines 60 – 67, Column 9 lines 1 – 8, Column 9 lines 34 - 45), and a step in which the first communication terminal receives response messages broadcast from other communication terminals and including the group identification information (Column 9 lines 34 – 40, Column 10 lines 41 – 49, the individual terminal discriminating information can be replaced with the group information after group setting occurs thus enabling the terminals in said group to respond with the group number), wherein the closed communication network is formed of the first communication terminal and at least one communication terminal which transmits the response message within a given time after the calling message is transmitted (Column 7 lines 58 – 65, Column 10 lines 41 – 49, Column 17 lines 6 – 15), wherein a group communication is performed by the communication message using the group identification information (Column 9 lines 34 – 45), wherein the group communication method includes a step in which the first communication terminal stores an address of the transmission source terminal of the response message

received within a given time after transmitting the calling message as a group constituting terminal corresponding to the group identifier (Column 7 lines 9 – 18, Column 10 lines 41 -49) and a step in which a control message indicative of the start of the group communication is transmitted to the group constituting terminal from the first communication terminal (Column 17 lines 6 - 15).

Nakamura does not teach a step in which, before the transmission of the control message indicative of the start of the group communication, an encryption key to be used in the group communication is informed from the first communication terminal to the group-constituting terminal and wherein the response message includes a public key of a transmission source terminal, and the first communication terminal informs transmission source terminals of respective response messages by encrypting an encryption key to be used in the group communication by the public key.

Vogler teaches an encryption key to be used in the communication is informed from the first communication terminal to the second communication terminal (Section 0011, Section 0013 lines 3 – 6, Section 0014 lines 1 – 3, Section 0015, Section 0016 lines 1 – 3) a public key of a source terminal, and encrypting an encryption key to be used in the communication by the public key (Section 0014 lines 1 – 3, Section 0015).

Nakamura and Vogler both teach communication devices that communicate via wireless links thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encryption key and encryption method taught in Vogler in the wireless system of Nakamura

for the purpose of providing secure communications between the terminals as taught by Vogler.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (5,771,352) in view of Kaye (5,694,393).

Regarding Claim 8, Nakamura teaches a group communication method in which a plurality of communication terminals form a closed communication network and perform communication, said group communication method comprising a step in which a calling message including group identification information is broadcast from a first communication terminal to a large number of unspecified communication terminals (Column 2 lines 48 – 51, Column 5 lines 61 – 67, Column 6 lines 1 – 7, Column 8 lines 60 – 67, Column 9 lines 1 – 8, Column 9 lines 34 - 45), and a step in which the first communication terminal receives response messages broadcast from other communication terminals and including the group identification information (Column 9 lines 34 – 40, Column 10 lines 41 – 49, the individual terminal discriminating information can be replaced with the group information after group setting occurs thus enabling the terminals in said group to respond with the group number), wherein the closed communication network is formed of the first communication terminal and at least one communication terminal which transmits the response message within a given time after the calling message is transmitted (Column 7 lines 58 – 65, Column 10 lines 41 – 49, Column 17 lines 6 – 15), wherein a group communication is performed by the communication message using the group

identification information (Column 9 lines 34 – 45), wherein the group communication method includes a step in which the first communication terminal stores an address of the transmission source terminal of the response message received within a given time after transmitting the calling message as a group constituting terminal corresponding to the group identifier (Column 7 lines 9 – 18, Column 10 lines 41 - 49) and a step in which a control message indicative of the start of the group communication is transmitted to the group constituting terminal from the first communication terminal (Column 17 lines 6 - 15) and the transmission source terminal is excluded from the group constituting terminals (Column 7 lines 58 – 65, when it is determined that the other terminal is not capable of communicating then said terminal is excluded) and when a state in which no group constituting terminals except for the own terminal are present, the group communication is finished (Column 8 lines 3 – 8, when a terminal is not in communication proximity with any other terminals no communication can occur thus this is an inherent characteristic).

Nakamura does not teach wherein the communication terminal receives a communication message indicating the leaving from the group from the other communication terminal.

Kaye teaches receiving a communication message indicating the leaving from the group from a communication terminal (Column 6 lines 65 – 67, Column 7 lines 1 – 2).

Nakamura and Kaye both teach communication devices that communicate via wireless links thus it would have been obvious to one of ordinary skill in the

art at the time the invention was made to use the leaving notification method taught in Kaye in the wireless system of Nakamura for the purpose of enabling an update of the terminal list as taught by Kaye thus enabling a user of a terminal to always know what other terminals are available to communicate with.

***Allowable Subject Matter***

7. The following is an examiner's statement of reasons for allowance: Claim 5 is allowed for the reasons set forth in the first office action dated January 20, 2004.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Quochien B. Vuong* 8/6/04

**QUOCHIEN B. VUONG**  
**PRIMARY EXAMINER**



Raymond S. Dean  
July 31, 2004